

What is claimed is:

- [Claim 1]** 1. A computer program for assisting a user to determine whether a hyperlink to a target uniform resource locator (URL) is spoofed, the method comprising:
- a code segment that listens with a computerized system for an activation of the hyperlink;
 - a code segment that extracts an originator identifier and encrypted data from the hyperlink;
 - a code segment that decrypts said encrypted data into decrypted data based on said originator identifier;
 - a code segment that presents information on a display unit;
 - a code segment that redirects; and
 - a code segment that determines whether the hyperlink includes said originator identifier and said encrypted data decrypts successfully, and then:
 - runs said code segment that presents, to present a confirmation of authentication to the user conveying the name of the owner and the domain name of the target URL, and
 - runs said code segment that redirects, to redirect the user to the target URL;
- and otherwise, runs said code segment that presents, to present a warning dialog to the user.
- [Claim 2]** 2. The computer program of claim 1, wherein the computer program is digitally signed.
- [Claim 3]** 3. The computer program of claim 1, wherein said code segment that listens runs as a service in said computerized system.
- [Claim 4]** 4. The computer program of claim 1, wherein said code segment that listens includes a hypertext transport protocol (HTTP) server.
- [Claim 5]** 5. The computer program of claim 1, wherein said code segment that listens listens at a preset non routable internet protocol (IP) address and at a preset port.

[Claim 6] 6. The computer program of claim 1, wherein said code segment that decrypts includes a code segment that extracts the target URL from said decrypted data.

[Claim 7] 7. The computer program of claim 1, wherein said the hyperlink includes the target URL and said code segment that decrypts includes:

a code segment that extracts a digital signature from said decrypted data; and
a code segment that verifies said digital signature against said originator identifier.

[Claim 8] 8. The computer program of claim 1, wherein said code segment that decrypts employs a public key associated with said originator identifier.

[Claim 9] 9. The computer program of claim 1, further comprising:
a code segment that matches said originator identifier to one of a plurality of registered originators; and
a code segment that retrieves a decryption key associated with said originator identifier for use by said code segment that decrypts.

[Claim 10] 10. The computer program of claim 1, wherein said code segment that presents employs a dialog box that only software running locally in said computerized system can provide, thereby avoiding confusion with a remotely generated browser window.

[Claim 11] 11. A system for assisting a user to determine whether a hyperlink to a target uniform resource locator (URL) is spoofed, the system comprising:

a computerized system having a display unit;
a logic in said computerized system that listens for activation of the hyperlink;
a logic that extracts an originator identifier and encrypted data from the hyperlink;
a logic that decrypts said encrypted data into decrypted data based on said originator identifier;
a logic that determines whether the hyperlink includes said originator identifier and that said encrypted data decrypts successfully;

a logic responsive to said logic that determines, that presents on said display unit a confirmation of authentication conveying the name of the owner and the domain name of the target URL and that redirects the user to the target URL; and
a logic responsive to said logic that determines, that presents on said display unit a warning dialog to the user.

[Claim 12] 12. The system of claim 11, wherein said logic that listens runs as a service.

[Claim 13] 13. The system of claim 11, wherein logic that listens includes a hypertext transport protocol (HTTP) server.

[Claim 14] 14. The system of claim 11, wherein said logic that listens listens at a preset non routable internet protocol (IP) address and at a preset port.

[Claim 15] 15. The system of claim 11, wherein said logic that decrypts includes a logic that extracts the target URL from said decrypted data.

[Claim 16] 16. The system of claim 11, wherein said the hyperlink includes the target URL and said logic that decrypts includes:

a logic that extracts a digital signature from said decrypted data; and
a logic segment that verifies said digital signature against said originator identifier.

[Claim 17] 17. The system of claim 11, wherein said logic that decrypts employs a public key associated with said originator identifier.

[Claim 18] 18. The system of claim 11, further comprising:

a logic that matches said originator identifier to one of a plurality of registered originators; and
a logic that retrieves a decryption key associated with said originator identifier for use by said logic that decrypts.

[Claim 19] 19. The system of claim 11, wherein said logic that presents employs a dialog box that only software running locally in said

computerized system can provide, thereby avoiding confusion with a remotely generated browser window.

[Claim 20] 20. A method for assisting a user to determine whether a hyperlink to a target uniform resource locator (URL) is spoofed, the method comprising:

listening for an activation of the hyperlink;

extracting an originator identifier and encrypted data from the hyperlink;

decrypting said encrypted data into decrypted data based on said originator identifier;

when the hyperlink includes said originator identifier and said encrypted data decrypts successfully:

presenting a confirmation of authentication to the user, wherein said confirmation of authentication conveys the name of the owner and the domain name of the target URL; and

redirecting the user to the target URL;

and otherwise, presenting a warning dialog to the user.

[Claim 21] 21. The method of claim 20, wherein said listening includes running at least one of a service and a hypertext transport protocol (HTTP) server in a computerized system.

[Claim 22] 22. The method of claim 20, wherein said listening is at a preset non routable internet protocol (IP) address and a preset port.

[Claim 23] 23. The method of claim 20, said decrypting includes extracting the target URL from said decrypted data.

[Claim 24] 24. The method of claim 20, wherein said the hyperlink includes the target URL and said decrypting includes:

extracting a digital signature from said decrypted data; and

verifying said digital signature against said originator identifier.

[Claim 25] 25. The method of claim 20, further comprising:

matching said originator identifier to one of a plurality of registered originators; retrieving a decryption key associated with said originator identifier for use in said decrypting.

[Claim 26] 26. The method of claim 20, wherein said presenting a confirmation employs a dialog box that only software running locally in a computerized system can provide, thereby avoiding confusion with a remotely generated browser window.